AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which claim 1 is currently amended.

- 1. (Currently Amended) A high-frequency measuring system for measuring a device under test, comprising:
 - a measuring-device unit; and
- at least one high-frequency module, wherein each high-frequency module is placed spatially separated from the measuring-device unit and each high-frequency module is connected to the measuring-device unit via a digital interface for transmitting data to the at least one high-frequency module, wherein

processing of input data <u>originating from the measuring-device unit</u> to form a bitstream for transmission via the digital interface includes assigning symbols to states in a state diagram of an I-Q (in phase – quadrature phase) level in the measuring-device unit, or

- a digitized intermediate-frequency signal is transmitted via the digital interface.
- 2. (Previously Presented) A high-frequency measuring system according to claim 1, wherein the at least one high-frequency module comprises a transmitter device or a receiver device for communication with the device under test.
- 3. (Previously Presented) A high-frequency measuring system according to claim 1, wherein the digital interface is a serial interface.

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4. (Previously Presented) A high-frequency measuring system according to claim 1, wherein the digital interface is a parallel interface.

- 5. (Previously Presented) A high-frequency measuring system according to claim 1, wherein the digital interface is an optical interface.
- 6. (Previously Presented) A high-frequency measuring system according to claim 1, wherein the digital interface is an electrical interface.
- 7. (Previously Presented) A high-frequency measuring system according to claim 1, wherein the at least one high-frequency module is supplied with electrical energy via a power-supply unit independent from the measuring-device unit.
- 8. (Previously Presented) A high-frequency measuring system according to claim 1, wherein a plurality of identical ports are provided on the measuring-device unit for the digital interface.
- 9. (Previously Presented) A high-frequency measuring system according to claim 1, wherein a plurality of different ports are provided on the measuring-device unit for the digital interface.
- 10. (Previously Presented) A high-frequency measuring system according to claim 1, wherein control data or user data is transmitted in a standardized form via the digital interface, and wherein the at least one high-frequency module comprises means for processing a high-frequency signal with regard to the transmission of data in standardized form via the digital

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interface or for processing the data transmitted in standardized form with regard to at least one predetermined transmission standard for the high-frequency signal.